



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/084,143	02/28/2002	David Engel	87335.3461	5066

7590 04/13/2004

BAKER & HOSTETLER LLP
Suite 1100
Washington Square
1050 Connecticut Avenue, N.W.
Washington, DC 20036

EXAMINER

THOMPSON, KENNETH L

ART UNIT PAPER NUMBER

3679

DATE MAILED: 04/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/084,143

Applicant(s)

ENGEL, DAVID

Examiner

Kenn Thompson

Art Unit

3679

ME

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 January 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 13-19 and 21 is/are allowed.
- 6) ☒ Claim(s) 1-6, 8-10 and 20 is/are rejected.
- 7) ☒ Claim(s) 7, 11 and 12 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Objections

The numbering of claims is not in accordance with 37 CFR 1.126 which requires the original numbering of the claims to be preserved throughout the prosecution. When claims are canceled, the remaining claims must not be renumbered. When new claims are presented, they must be numbered consecutively beginning with the number next following the highest numbered claims previously presented (whether entered or not).

Misnumbered claims 14-22 been renumbered 13-21.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-6, 8, 10 and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Sheppard, U.S. 4,710,080.

Regarding claim 1, Sheppard discloses in figures 5-7 a retaining ring movable between an unyielded state and a yielded state (col. 3, lines 56-65). Sheppard discloses a generally C-shaped region (10) having an inner peripheral surface; an outer peripheral surface; a first end (left edge of split 26); and a second end (right edge of split 26). Sheppard discloses wherein the retaining ring is formed from a yieldable material that has little or no shape memory that yields when moved from the unyielded state to the yielded state.

Art Unit: 3679

As to claim 2, Sheppard discloses a first leg (extension of 10 near left edge of 26) extending from the first end.

As to claim 3, Sheppard discloses a second leg (extension of 10 near right edge of 26) extending from the second end.

As to claim 4, Sheppard discloses the C-shaped portion (10) is a curve that is circular in shape.

As to claim 5, Sheppard discloses each of the legs further comprise a respective termination portion (outer circumferential edges of the legs is considered to be the termination portion).

As to claim 6, Sheppard discloses wherein the termination portion of the first leg further comprises a tool receiving region (leg at slots 22) and the termination portion of the second leg further comprises a tool receiving region (leg at slot 22).

As to claim 8, Sheppard discloses the ring is constructed from a ductile material (col. 3, lines 56-65).

As to claim 10, Sheppard discloses in figures 1-4 a first finger (16) projecting from the inner peripheral surface.

Regarding claim 20, Sheppard discloses a retaining ring movable between an unyielded state (fig 1) and a yielded state (fig 4). Sheppard discloses a generally C-shaped region (10) having an inner peripheral surface, an outer peripheral surface, a first end (right edge of split 26); and a second end (left edge of split 26). Sheppard discloses the retaining ring being formed from a yieldable material that has little or no shape memory that yields when moved from the unyielded state to the yielded state (col. 3, lines 56-65). Sheppard discloses a first leg (extension of 10 at right edge of 26) extending from the first end and having first tool receiving

Art Unit: 3679

means (outer circumferential edge of the first leg) for receiving a tool (14); and a second leg (extension of 10 at left edge of 26) extending from the second end and having second tool receiving means (outer circumferential edge of the first leg) for receiving a tool (14).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sheppard, U.S. 4,710,080.

As to claim 9, Sheppard discloses the ductile material is bronze or other suitable material. Sheppard does not disclose non-work-hardened stainless steel. However it would have been obvious to one having ordinary skill in the art at the time of the invention to arrange for the retaining ring disclosed by Sheppard to be non-work-hardened stainless steel, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

Allowable Subject Matter

Claims 13-19 and 21 are allowed.

Claims 7, 11 and 12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

The prior art of record does not disclose or suggest all the claimed subject matter including the tool receiving region is one of a slot, a hole and nor a dimple.

The prior art of record does not disclose or suggest all the claimed subject matter including four fingers projecting from the inner peripheral surface.

The prior art of record does not disclose or suggest all the claimed subject matter including the first and second legs being substantially straight and point toward each other in the unyielded state.

The prior art of record does not disclose or suggest all the claimed subject matter including twisting the retaining ring in first direction, reducing the diameter of the ring and causing the ring to yield into a yielded state and twisting the retaining ring in second direction opposite to the first direction, increasing the diameter of the ring and causing the ring to yield into an unyielded state.

The prior art of record does not disclose or suggest all the claimed subject matter including moving the ring from the second, yielded state into the first, unyielded state by rotating the tool engaged with the legs of the ring.

The prior art of record does not disclose or suggest all the claimed subject matter including the generally C-shaped portion has a first radial width between the inner peripheral surface and the outer peripheral surface; a first and second leg having a second width greater than the first width; deforming the retaining ring from the first configuration, to the second configuration, wherein in the second, contracted configuration the first tool receiving portion

Art Unit: 3679

translates to be located a distance further from the center point and wherein the second tool receiving portion translates to be located a distance closer to the center point.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Szukay et al., U.S. 4,818,166 discloses a similar non-resilient ring.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenn Thompson whose telephone number is 703 306-5760. The examiner can normally be reached on 7:00 am - 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynne H Browne can be reached on 703 308-1159. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


2 April 2004